

**DEPARTMENT of ENVIRONMENTAL SERVICES**  
**Water Supply & Pollution Control Division - Biology Bureau**

**LAKE TROPHIC DATA**

**MORPHOMETRIC:**

Lake: STONE POND	Lake Area (ha): 8.38
Town: FITZWILLIAM	Maximum depth (m): 1.4
County: Cheshire	Mean depth (m): 0.5
River Basin: Connecticut	Volume (m <sup>3</sup> ): 38500
Latitude: 42°45'25" N	Relative depth: 0.4
Longitude: 72°07'40" W	Shore configuration: 1.95
Elevation (ft): 1035	Areal water load (m/yr): 164.0
Shore length (m): 2000	Flushing rate (yr <sup>-1</sup> ): 359.0
Watershed area (ha): 2579.6	P retention coeff.: 0.12
% watershed ponded: 2.2	Lake type: natural w/dam

<b><u>BIOLOGICAL:</u></b>		<b>4 February 1992</b>	<b>6 September 1991</b>
DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	SYNURA 45%
	#2		FILAM. BL-GR. SPP. 20%
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			
CHLOROPHYLL-A (µg/L)			1.04
DOM. ZOOPLANKTON (% TOTAL)	#1	NONE OBSERVED	NAUPLIUS LARVAE 45%
	#2		KERATELLA 30%
	#3		(NO CELL COUNTS)
ROTIFERS/LITER		<1	
MICROCRUSTACEA/LITER		<1	
ZOOPLANKTON ABUNDANCE (#/L)		<1	
VASCULAR PLANT ABUNDANCE			Abundant
SECCHI DISK TRANSPARENCY (m)			0.7
BOTTOM DISSOLVED OXYGEN (mg/L)		12.3	1.2
BACTERIA (fecal col., #/100 ml) #1			75
	#2		
	#3		

**SUMMER THERMAL STRATIFICATION:**

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**Lake: STONE POND  
Town: FITZWILLIAM

	4 February 1992		6 September 1991		
DEPTH (m)	1.0		1.0		
pH (units)	5.6		5.4		
A.N.C. (Alkalinity)	1.9		1.7		
NITRATE NITROGEN	0.03		< 0.05		
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.012		0.043		
CONDUCTIVITY ( $\mu$ mhos/cm)	72.1		51.7		
APPARENT COLOR (cpu)	47		250		
MAGNESIUM			0.41		
CALCIUM			2.1		
SODIUM			6.3		
POTASSIUM			0.79		
CHLORIDE	14		9		
SULFATE	7		2		
TN : TP					
CALCITE SATURATION INDEX			5.3		

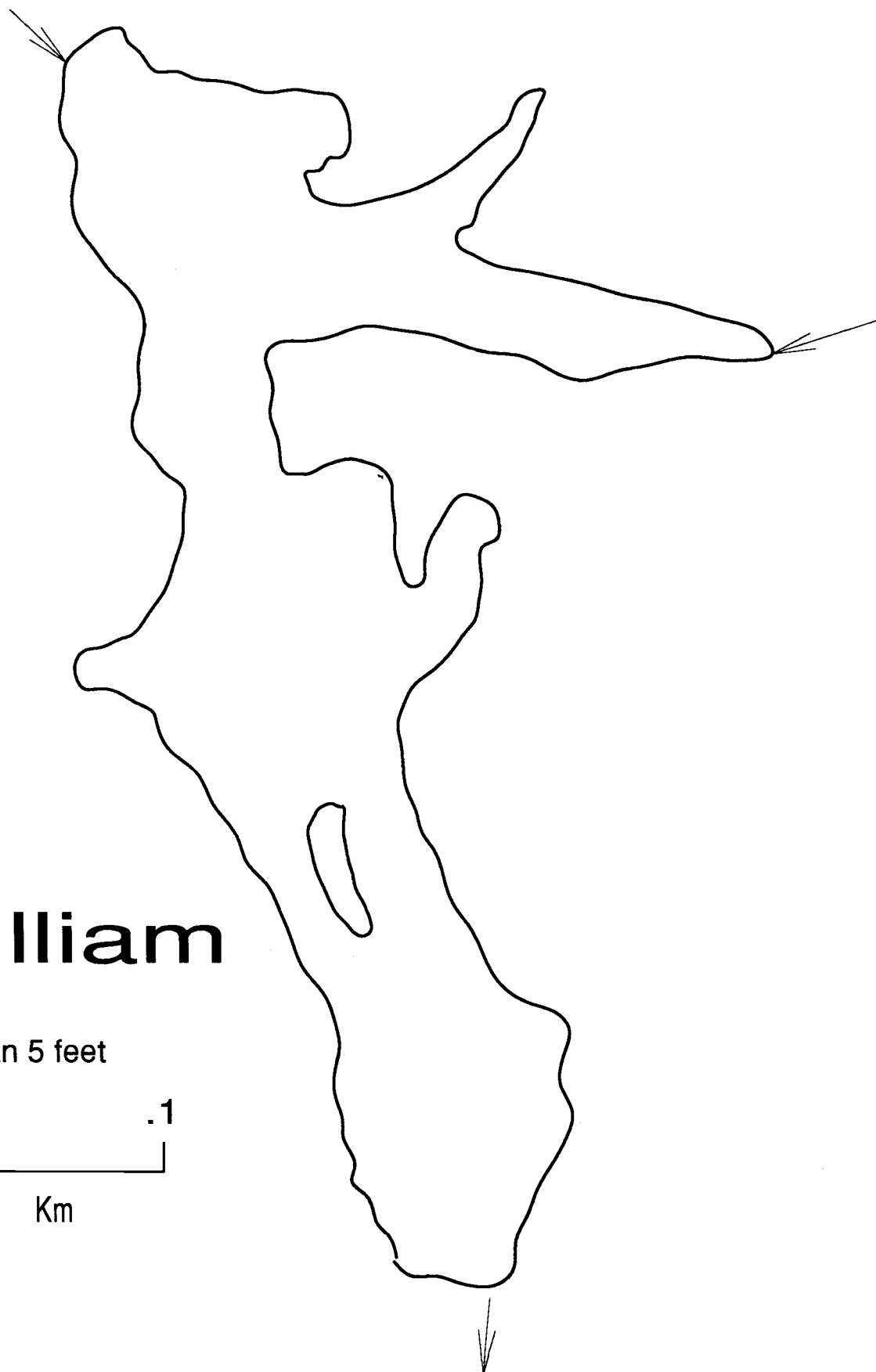
All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1991**

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	5	5	0	10	Eutro.

**COMMENTS:**

1. Also known as Mill Pond.
2. Extremely dark tea-colored water.
3. Observed wood chips when pulling up the anchor.
4. No public access; pond can be accessed by a short overland portage from the road with a canoe or light boat.
5. Wholewater plankton was sparse with no dominant; mostly tiny flagellates were present. No cell counts were made.



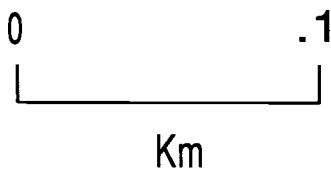
N



**Stone  
Pond**

**Fitzwilliam**

All depths less than 5 feet



[illegible]

TOWN: FITZWILLIAM  
WEATHER: PARTLY SUNNY & WARM

[illegible]

**COMMENTS :**

111-245



[illegible]